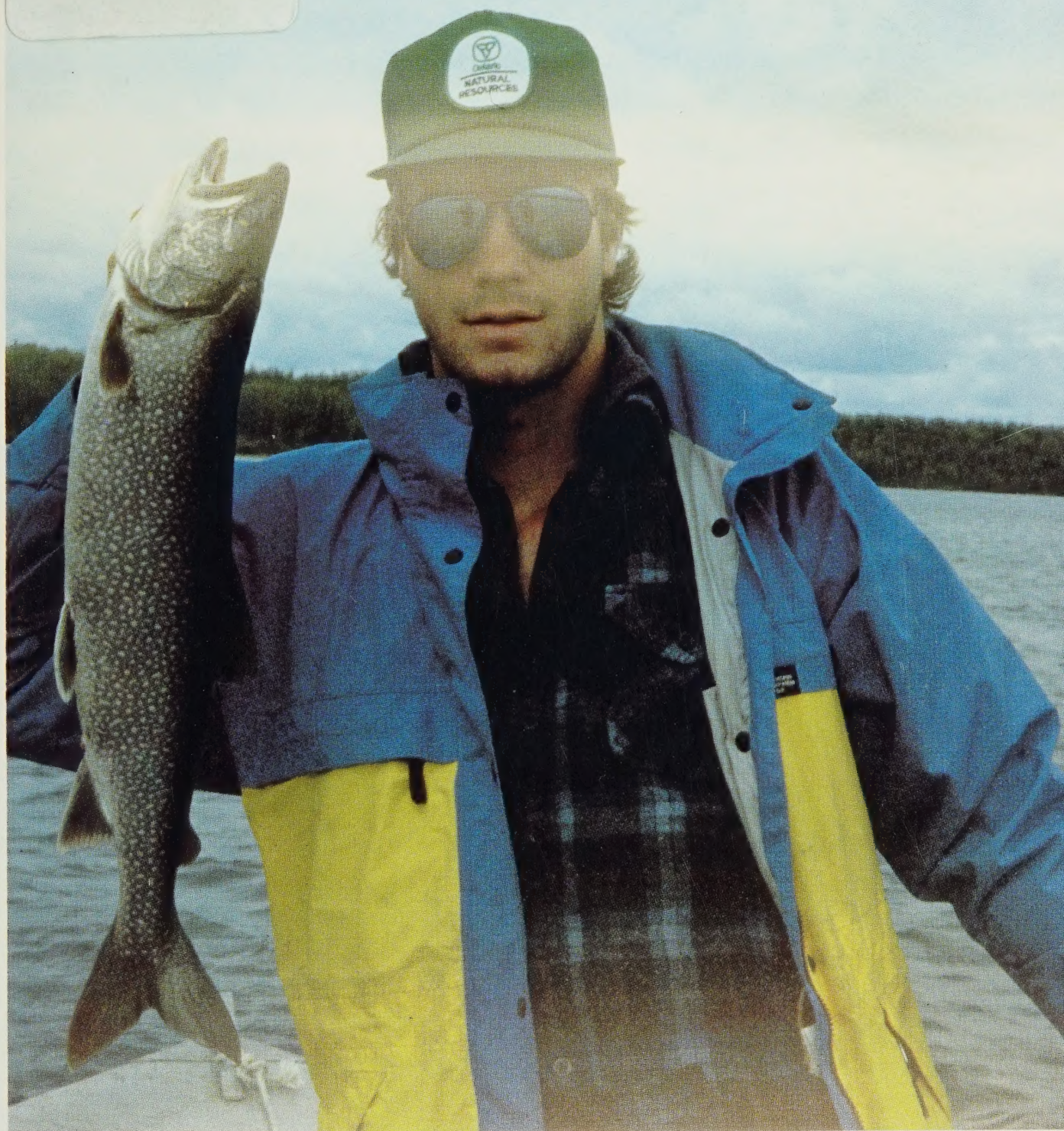


# Fishing in the Moosonee District

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Ministry of  
Natural  
Resources  
Lyn McLeod  
Minister



*Funding to produce this brochure was available  
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Fishing Licence.*

*Copies of This Publication are available at no charge*

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## INTRODUCTION

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The Moosonee District is the largest Ministry of Natural Resources (MNR) administrative district, representing 22 percent of the province's land base. This remote land area of approximately 221,000 square kilometers, extends from a southern boundary of 50° 30' north latitude, east to the Quebec border and northwest to the Manitoba border. Ninety-nine percent of the District is Crown land. Islands not connected to the mainland at the low tide are not part of the District but are governed by the Northwest Territories. Akimiski Island, east of the community of Attawapiskat, is such an example.

The District is within the physiographic region known as the Hudson Bay Lowland. This wetland complex is situated in the Hudson Bay Drainage Basin, a land poorly drained by numerous watersheds. In the north the principal river systems that drain into Hudson Bay are the Severn, Winisk and Sutton. The southeast portion of the District drains into James Bay via the Ekwan, Attawapiskat, Albany, Moose and Harricanaw rivers. In addition to these large rivers more than 450 inland tributaries, over 300 coastal rivers and streams and approximately 20,800 inland lakes can be found; however, only five percent of these lakes are greater than 100 hectares.

The fish species that inhabit this portion of Ontario include the only sea run brook trout found within the province and a variety of other species. The sea run brook trout are found in most of the coastal streams and rivers that flow into Hudson and James bays. Due to the shallowness of the majority of lakes, such species as northern pike, walleye, lake whitefish and sucker are only widespread in the larger lakes and rivers. Lake sturgeon are found in the largest rivers and lake trout are known to occur only in four lakes.

There is a variety of fishing experiences available to anglers that visit the Moosonee District. Anglers may fish in the major rivers and small tributaries in the immediate vicinity of the coastal communities, or fly-in to remote trout lakes, major brook trout rivers and a few inland pike and walleye lakes. Canoeists may fish while canoeing major rivers and goose hunters often take the time to fish while registered at a commercial goose camp along the coast. Transportation costs usually increase as one fishes further north of Moosonee.



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## ACCESS

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Access to and throughout the District is difficult for no road network exists. Travellers must take the Ontario Northland Railway north from Cochrane to Moosonee, fly into Moosonee from the Timmins, Kapuskasing or Cochrane areas or take the time to travel one of the many canoe routes. Canoe routes take travellers to the southern shores of James Bay, Moosonee, Moose River Crossing or one of the more northern coastal communities.

Travellers taking the train can board the Polar Bear Express, which runs six days a week throughout the tourist season or travel the regular passenger train which runs year round.

Air flights can be taken to all coastal communities, commercial fishing and hunting camps and to Polar Bear Provincial Park. For visitors to Polar Bear Provincial Park landing permits are required and issued only for the following landing sites: Site 415, Brant River, Sutton River and Shagamu River. Other landing



*Photo 1 : AERIAL PHOTOGRAPH OF THE HUDSON BAY LOWLAND*





*Photo 2 : INTERIOR LAKES MOOSONEE DISTRICT*

sites are available outside of Polar Bear Provincial Park if water level conditions are suitable. We suggest you contact the Moosonee District Office for further information on travelling north of 50°30'.

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## FISHERIES MANAGEMENT

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Fisheries management within the District is directed towards protecting and improving fish communities and their environment to provide fish, fishing opportunities and associated benefits to society. To respond to present and future fisheries issues the District staff will continue to develop strategies that ensure a healthy resource.

The following management programs are highlighted below:

### (a) Inventory and Assessment

Inventory and assessment of the District's brook trout, lake trout, sturgeon and walleye fisheries forms a large portion of the fisheries management program. Programs include; creel surveys, the tourist outfitter angler diary program, index netting on selected lake trout lakes and sturgeon river fisheries as well as the lake survey program.



Creel surveys and the tourist outfitter angler diary program encourage sport anglers and tourist outfitters to supply District fisheries staff with information on fish harvests, fishing efforts and biological characteristics on species caught. Native commercial fishermen as well as District staff are involved with index netting studies that supply information that help to monitor lake and river fish stocks. Information on the number of species caught for a designated length of time and type of gear as well as biological data, including age, weight and length measurements are recorded. This information is collected during creel surveys, index netting studies and via the angler diary program to allow assessment of present harvests, to determine problems and to take appropriate action.

The lake survey program is a provincial standardized survey which is used as a basis for future resource allocation. Lake surveys are also used to ensure the resource is protected and to help fisheries staff comment on future management or development programs.



*Photo 3 : CREEL SURVEY MOOSONEE DISTRICT*



### (b) Community Fisheries Involvement Program (CFIP)

In 1982, the **Community Fisheries Involvement Program** was created to allow members of the public to become involved in hands on fisheries management projects.

All MNR approved projects are selected by interested and concerned groups such as fishing clubs, community associations or schools. Such CFIP groups have worked hard on projects that include: cleaning up streams, stabilizing stream banks, installing fishways and many other projects. CFIP projects have not only improved the aquatic habitat but have also been important tools in educating the fishing and non-fishing public of the importance of the province's fishing resource and in promoting a public stewardship of this resource.

Through CFIP, the MNR offers expertise and financial help at the local level with the sponsored group providing volunteer labour or donating equipment and materials to be applied to ongoing MNR programs. For further information contact your local MNR district office.



*Photo 4: CANOEING IN POLAR BEAR PROVINCIAL PARK*



### (c) Fishing Regulations

As part of the District fisheries management program, fishing regulations have been established to protect, maintain and enhance fisheries and fishing opportunities for different fish species. For more information on these and other fisheries regulations refer to the **Fishing Regulations Summary**.

#### Special Regulations

In the northern portion of the District (*Division 14*) anglers are permitted to possess and use only single barbless hooks. Barbless hooks are hooks which have been manufactured without a barb or which have been altered such that the barb has been completely removed or has been compressed to be in complete contact with the shaft of the hook. As well, no person may possess more than one brook trout, in excess of 40 cm (16 in.) with their limit of five (5) from waters north of 54°00 N latitude (see map).

Anglers are permitted to use only single barbless hooks as a result of a study that showed an unusual condition of the Hudson Bay Lowland sea run brook trout. Observations from Sutton River brook trout showed that the blood of these fish did not clot readily and that fish often died of hooking mortality, even when released. Tackle tests were conducted and it was found that the use of single barbless hooks significantly reduced the number of fish that died once released.



Photo 5: COMPARISON BETWEEN MULTIPLE TREBLE & SINGLE BARBLESS HOOKS



The size limit for brook trout was initiated to protect the spawning population of the Hudson Bay coast brook trout fisheries while allowing for angler opportunities to continue fishing throughout the tourist season. It is hoped that both these regulations will increase angler opportunities as well as to protect this valuable world class sea run brook trout resource.

#### (d) Resident Sport Fish Licence

The Ontario Resident Sport Fishing Licence has been in effect now since January 1, 1987. The revenue generated from the sale of these licences has been used for research and also practical measures to improve the fisheries resource in Ontario. For more information concerning the Ontario Resident Sport Fishing Licence contact your local MNR district office.

#### (e) Reporting Tagged Fish

If an angler is fortunate to catch a tagged fish in the waters of the District, please send your name and address, the species of fish, total length (tip of snout to tip of tail), weight, when and where it was caught and the tag itself to the Ministry's District Office in Moosonee. If more than one tag occurs on a fish, both tags should be reported. If possible, a sample of eight to ten scales from the fish should also be included.

Tagged fish help fisheries managers determine fish species migration patterns, age, spawning habits, and other seasonal distributions or population status of selected fish stocks.

*Get involved, report all tagged fish. This program depends on you!*

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## **CONTAMINANT MONITORING**

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The District contains background mercury levels which are naturally leached into Hudson Bay Lowland waterways. Waters used domestically by the general public as well as popular angling waters are often tested for organic chemicals and mercury levels by using popular game species. The MNR supplies the Ministry of the Environment (MOE) with fish flesh samples from waters used by the angling and general public. Such cooperation between the MOE and MNR informs anglers as to the contaminants status of a favoured river or lake. For more information consult the **Guide to Eating Ontario Sport Fish** available at most MNR district offices.



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## CANOE ROUTES

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The coast of Hudson and James bays are Ontario's only salt water coastlines. All of the major rivers which flow into the two bays are affected by tides which may reach as far as 30 km upstream from the mouth of a river.

On the routes which terminate on the Hudson Bay coast, there is superb fishing with brook trout, walleye, northern pike and lake sturgeon in the major rivers and brook trout in the smaller streams. Within the Moosonee District the sea run brook trout are among the largest anywhere.

As well as fishing there is an opportunity to view such species as woodland caribou, bearded and ringed seal, polar bear and thousands of Canada geese and snow geese. Canoeists access this portion of the District via canoe from the south and return via chartered aircraft.

A number of canoe routes access the west coast of James Bay but the most popular are those that terminate in Moosonee or at the southern end of James Bay. Access is much easier than those that terminate in the far north as canoes can be transported south using the Ontario Northland Railway at Moosonee. Fishing on these routes is moderate to good.

Canoeists should be prepared to deal with mosquitoes and blackflies when travelling these routes. By wearing light coloured clothing, that button down around the collar and wrists, setting up camp in wind exposed locations and using insect repellents will help any canoeist cope with these beasts. People travelling any canoe route should carry with them a first aid kit and inform family members and local authorities of their plans to travel their chosen route. Canoeists should never venture beyond a river mouth onto Hudson or James bays unless they are accompanied by a qualified local guide.

Water levels on these routes fluctuate greatly during the canoeing season, with spring levels being very high and levels receding towards the fall. A check with the District Office just prior to your trip will give you current information on water levels.



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# THE ANGLER'S CODE

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A good angler:

- *respects private property and the rights of others*
- *knows and obeys the fishing regulations*
- *does not damage fish habitat*
- *puts safety first in the use of his/her equipment and the enjoyment of the sport*
- *takes pride in his/her skill*
- *helps others to understand the recreation of fishing*
- *leaves the environment as clean as he/she found it; does not litter*

*A good angler has respect for his/her quarry before and after catching it, and knows there is much more to fishing than catching his/her limit.*

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## HOW TO RELEASE A FISH

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More and more sport anglers are catching and releasing fish back into the waters in which they have been fishing. Anglers are becoming more aware of stresses on fisheries and realizing angler opportunities do not necessarily mean catching one's limit. Here are a few simple tips for those anglers who wish to release fish:

- 1. Time is essential! Quickly play and release fish. A fish played too long will probably not recover.*
- 2. Keep the fish in the water as much as possible. Remove the hook as quickly as you can. Single barbless hooks can often be removed while the fish is still in the water.*
- 3. Gentle handling of fish is important. Avoid putting your fingers in the gills or eye sockets.*
- 4. To revive an unconscious fish hold it upright in the water. Move the fish forward and backward so that the water runs through the gills. This may take a few minutes. When it begins to struggle, release it.*



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## Brook Trout

(*Salvelinus fontinalis*)

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**I**ndigenous to Ontario, the **brook trout** or **speckled trout** usually inhabits cold clear spring fed streams and lakes. A large portion of the brook trout that are found in the watersheds draining into the Hudson and James bays are sea run brook trout. These trout spend part of their life in the salt waters of the bays where they grow quickly.

Spawning takes place in coarse sand and fine gravel where spring seepage is present. Spawning occurs from August to December with the eggs hatching in early spring.

Brook trout is a favoured species of both sport anglers and Native food fishermen. Sport fishing for brook trout is accomplished by angling in the large rivers along the Hudson Bay coast, on waters close to the coastal communities and at designated hunting and fishing camps located throughout the District.



*Photo 6 : BROOK TROUT FISHING, MOOSONEE DISTRICT*



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## Lake Trout

(*Salvelinus namaycush*)

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**T**here are four remote lakes in which **lake trout** can be found in the District. Aircraft are required to access these areas.

Lake trout usually spawn for the first time at ages six to eight years. Spawning takes place between dusk and midnight over gravel or rubble shoals during October and November. The eggs incubate during the winter and hatch from mid-February to late March.

Lake trout form an important component of the Moosonee angler's creel as well as for subsistence Native fishing. Further regulations will be proposed to ensure that these four lake trout lakes are protected from overfishing.

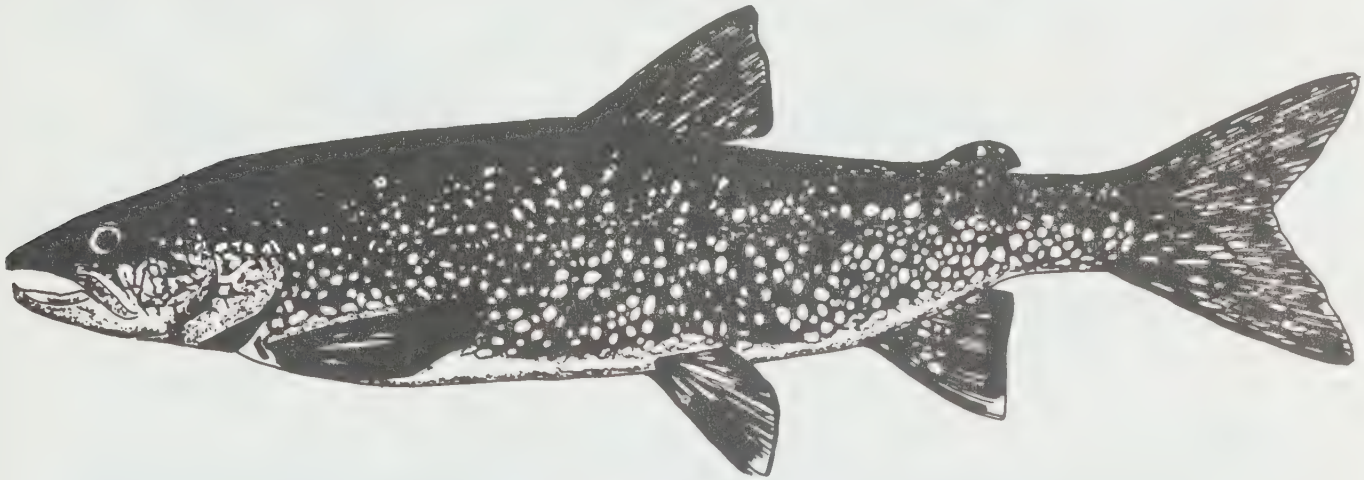


Photo 7 : FISHING IN THE INTERIOR LAKES, MOOSONEE DISTRICT



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## Northern Pike:

(*Esox lucius*)

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**N**orthern pike are found throughout most of Canada and are present in a number of cool lakes and rivers throughout the District.

Northern pike spawn in the spring as soon as the ice melts in early to mid-May. In general, this species spawns during daylight hours in heavily vegetated flood plains of rivers, marshes, and bays of larger lakes. The eggs usually hatch in 12-14 days after being laid. An often underutilized species in the District, the northern pike is used by Native subsistence fishermen as well as by sport anglers, and when properly prepared is delicious fried, baked or boiled.



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## Walleye:

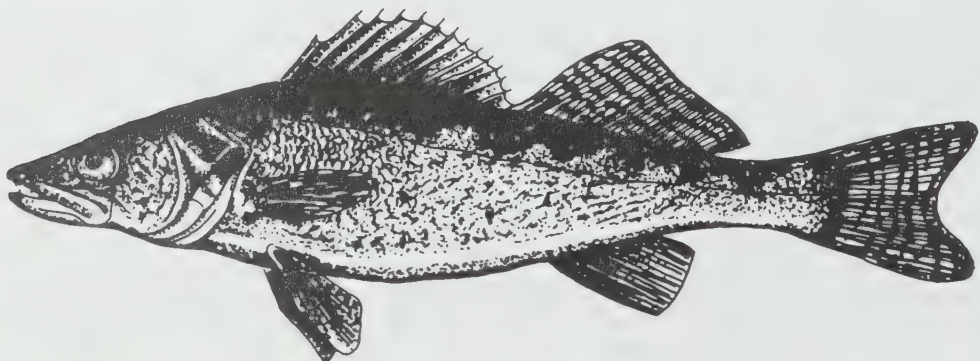
(*Stizostedion vitreum*)

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**W**alleye are found in the major rivers and lakes which drain into Hudson and James bays. This cool water species derives its name from the special structures within their eyes that allows them to feed in low light conditions. Adapted to darker waters the walleye avoids bright areas during the daylight hours.

Walleye spawn in clean rubble in shallow, often windswept, waters at a depth of 0.3 - 1.0 m. The current washes oxygen over the eggs and dilutes wastes released by the eggs. Within the District, spawning usually takes place in mid to late May or early June with the eggs hatching in 12 - 18 days.

Walleye is the most popular sport fish in Ontario and is also a contributor to the Native food fishery. The walleye can be used in many different recipes and is considered one of the best eating fish available in Ontario.





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## Lake Sturgeon:

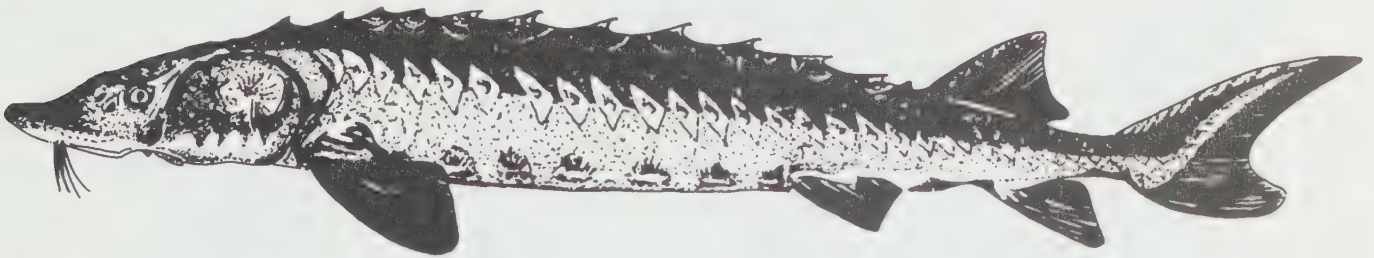
(*Acipenser fulvescens*)

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**L**ake sturgeon is primarily a river dweller. It can be found throughout the District in the major rivers as well as the rest of Ontario.

Spawning takes place from early May to late June. Sturgeon have been known to travel great distances of up to 400 km to spawn. Feeding ceases over the entire spawning period. Spawning takes place in depths of 0.6 - 3.6 m and in areas of swift water or rapids.

The sturgeon is a component of the Native food fishery and is taken commercially on the Moose River. Sturgeon flesh is a highly sought after delicacy and its eggs are often marketed as caviar.



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## Lake Herring:

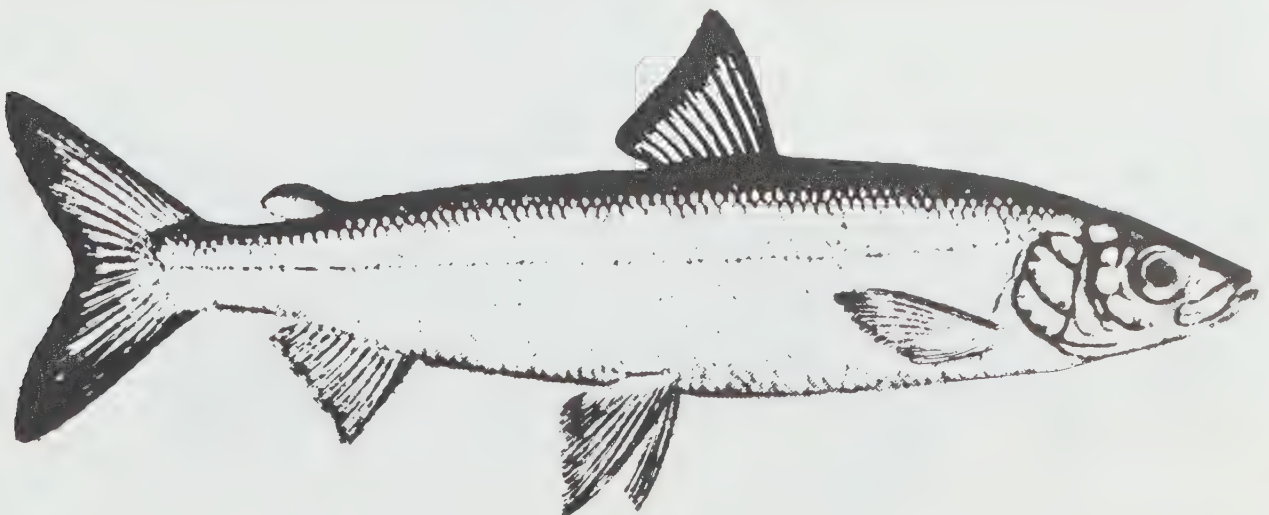
(*Coregonus artedii*)

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**L**ake herring or ciscoe inhabit cold, clear waters of deep lakes in the District.

Lake herring usually spawn in late September when the temperature of the lakes begins to drop. These fish prefer spawning at a depth between 1 - 3 meters on gravel or stoney spawning sites, but will spawn in other areas.

Lake herring are a component of the Native food fishery in the District. They are caught with smaller hooks and hooks used for brook trout do nicely. This fish is good baked after scaling and gutting, but is also tasty when filleted. Pickling and smoking the flesh of this fish are two alternative types of preparation.





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## Lake Whitefish: *(Coregonus clupeaformis)*

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**T**he lake whitefish are found in many of the lakes and rivers in the District, and are widespread throughout the rest of Ontario.

Spawning times vary, but usually the fish spawn in late fall, in waters with an average depth of 8 metres or less. The lake whitefish spawns on hard or stoney bottoms but will use sandy bottoms as well.

A delicate fish, the whitefish must be angled carefully for setting the hook often tears the mouth of the fish. When caught or netted this fish usually dies quickly. It is a favoured fish of the Natives, for it is easy to scale and is excellent when baked or fried after prepared into fillets.



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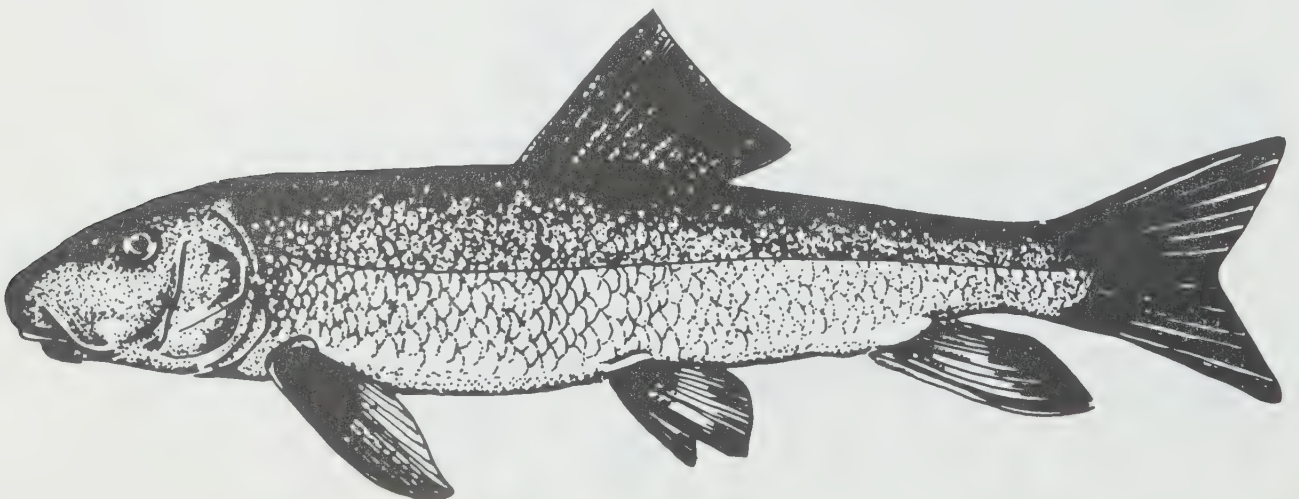
## White Sucker: *(Catostomus commersoni)*

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**T**he white sucker has a similar but slightly smaller range than the longnose sucker; however, it is found throughout the District.

The white sucker spawns in spring, usually between mid-May and early June.

Its flesh is used by Native families and is delicious when smoked. Its white, sweet flesh is also good in soups and chowders.





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## Longnose Sucker: (*Catostomus catostomus*)

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This species can be found throughout the District as well as the rest of Canada.

**T**he longnose sucker spawns in the spring in streams where available or in shallow areas of lakes. It is usually late May before it warms sufficiently for spawning activities. The fish prefer a gravel bottom of a shallow stream with a slight current.

Best smoked, it is caught and used by Native subsistence fishermen.

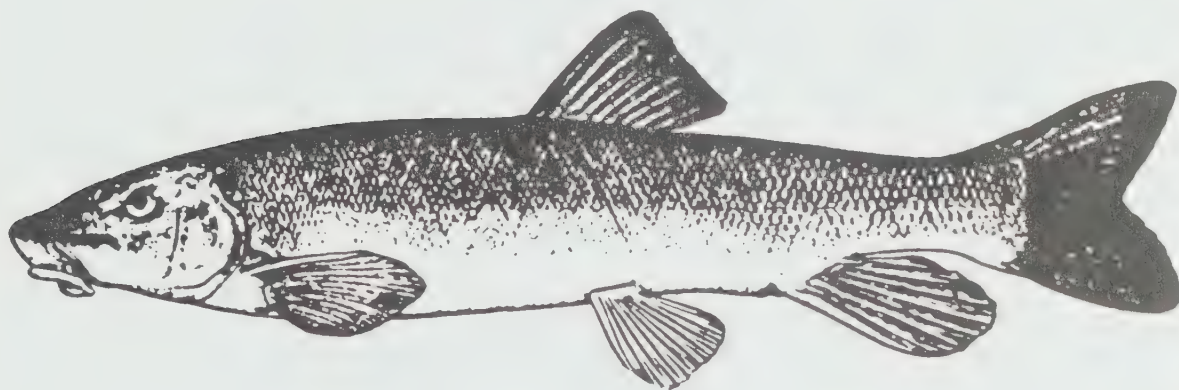


Photo 8 : NATIVE SUMMER CAMP, MOOSE RIVER, 1955





*Photo 9 : CANOEING INTERIOR LAKES*

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## **Native Food Fishery**

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**T**he Native food fishery is the largest form of harvest in the District. Natives from all the communities harvest fish from the major rivers, accessible inland tributaries and lakes and coastal streams for food. This fishing is conducted by both netting and angling. Known fishing areas include waterways close to the coastal communities and selected cool and coldwater fisheries.



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# Fisheries of the Ontario Hudson Bay and Northern James Bay Coasts

## LEGEND

### Fish Species

- ▲ Brook Trout
- △ Lake Trout
- Lake Sturgeon
- Other Native Food Fish Species
  - Lake Herring
  - Longnose Sucker
  - White Suckers
- Cool Water Lake Species
  - Lake Whitefish
  - Walleye
  - Northern Pike

### Fisheries Division Boundary

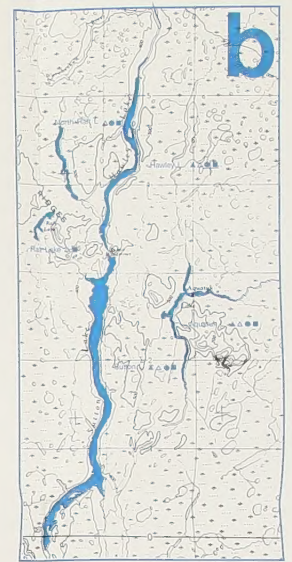
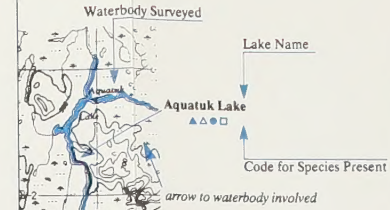
- Access
  - ○ ○ Canoe Routes
  - ■ ■ Historical Canoe Routes
  - ⓐ Major Aircraft Access Point within Polar Bear Provincial Park. (Landing at own risk.)
- Community Location
- +— Ontario Northland Railway
- Mooseonee Administrative District
  - ■ ■ Provincial Boundary
  - ▨ Indian Reserve
  - ⓧ MNR District Office (Mooseonee) or Polar Bear Provincial Park Office (Pezwanuck)
  - ▨ Winisk River Provincial Park
  - XXXX Polar Bear Provincial Park

Miles 10 0 10  
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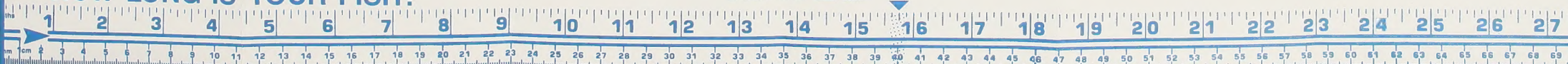


## Guide to Reading Species Codes



## HOW LONG IS YOUR FISH?

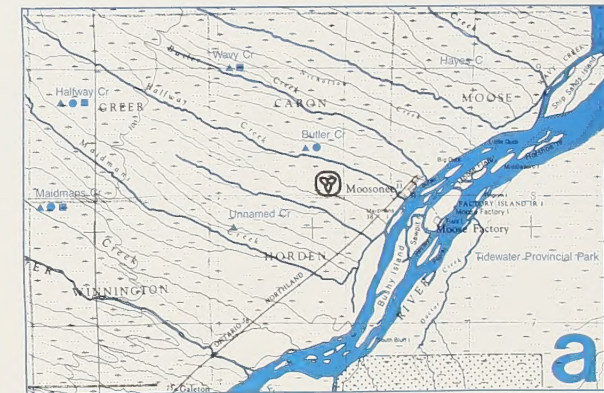
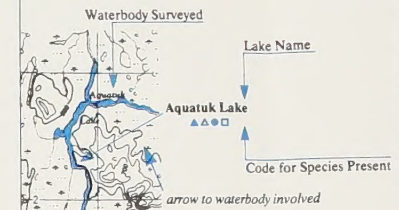
BROOK TROUT SIZE LIMIT





# Fisheries of the Ontario Southern James Bay Coast

## Guide to Reading Species Codes



## Legend

### Fish Species

- ▲ Brook Trout
- △ Lake Trout
- Lake Sturgeon
- Other Native Food Fish Species
- Lake Herring
- Longnose Sucker
- White Sucker
- Cool Water Lake Species
- Lake Whitefish
- Walleye
- Northern Pike

### Fisheries Division Boundary

- Access
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- Provincial Park
- Indian Reserve
- MNR District Office ( Moosonee )
- or Polar Bear Provincial Park Office ( Peawanuck )
- Provincial Boundary
- N.W.T. Lands Belonging to the Northwest Territories

Miles 10  
Kilometres 10











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